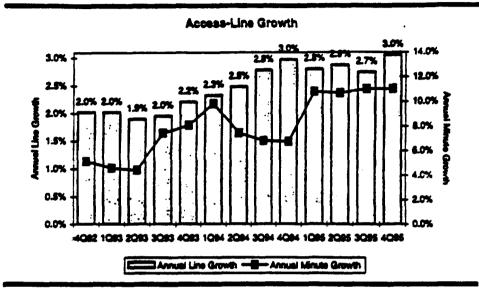
increased 4Q expense by \$33 million. On a normalized basis, therefore, CO&S expenses were flat year-over-year in 4Q vs. a reported 6.8% decline. Several other out-of-period adjustments and accruals off-set this one-time item, including (1) \$18 million in debt refinancing costs that are part of PacTel's ongoing debt refinancing initiative, and (2) a \$53 million year-over-year increase in software costs due to PacTel's decision to purchase software rather that pay right-to-use fees — this increased software expense in the fourth quarter, but will reduce software expense in later periods.

Pacific Telesis: Line Growth Jumps Back Up, Minute Growth Levels Off



Investment Conclusion

We maintain our Accumulate (B-2-2-8) rating on Pacific Telesis. We believe PAC will participate in the expected upward movement of the RBOC group but with less upside for the following reasons: (1) Significant startup expenses (over \$1.58), currently being deferred, from its PCS buildout will hit in 1997, (2) the California local market was opened to facilities-based competition on January 1, 1996 and will open to resale competition on March 1, 1996, and (3) PacTel has stated in the past that its dividend is not 100% safe given the upcoming competition, a difficult regulatory environment and PCS dilution. Dividend safety could depend on the outcome of several pending regulatory decisions, including decisions on a \$214 million rate increase requested by PacTel, unbundled and bundled resale rates, the degree to which competitors will be forced to contribute to the universal service and general subsidy funds, and whether the CPUC will eliminate the rate of return sharing provisions currently in effect. We expect the CPUC to address these issues over the next 6-9 months and thus foresee some continued and likely exaggerated overhang from dividend safety concerns.

On the positive side, the CPUC suspended Pacific Bell's 5% productivity factor ("x" factor) — capping prices at current levels, but allowing for some downward flexibility. Had the 5% productivity factor been maintained, the required rate reductions in 1996 would have been about \$116 million. Given downward pricing flexibility, we expect PacTel will continue to reduce rates for those services likely to be most targeted by competitors, offsetting much of the \$116 million cushion provided by the CPUC's decision.

SBC Communications /p/ SBC - \$55 3/4 ORG Shares PPS PPS PPS Growth Rate
Rating Out 4004A 4004A 1995A 1996E 1997E 95-95E 97-95E
8-2-1-7 610 \$0.83 \$0.77 \$3.08 \$3.42 \$3.80 11.1% 11.1%
* EPS Square are an resurring basis and thus do not relact one-time terms.

Highlights: 4Q A Penny Shy, No Changes SBC earned a recurring \$0.83 in 4Q, up 8% y/y, \$0.01 shy of our estimate but in-line with consensus. On a reported basis, SBC earned \$0.85 in 4Q, including the following one-time items netting to a \$0.02 gain: (1) a charge of \$139M (\$88M after-tax or \$0.14/sh) in SG&A to cover cost associated restructuring; (2) a \$170M gain (\$111.5M after-tax or \$0.18/sh) in other income from the merger of its UK cable operations with Telewest in October; and (3) an \$18M charge (\$11.4M after-tax or \$0.02/sh) for debt refinancing. For the full year, SBC earned \$3.08 (recurring), up 10% y/y. We made no change to our ests. of \$3.42 (11.1% growth) in 1996 and \$3.80 (11.1% growth) in 1997.

Revenue Growth
Lower Than
Expected, Partially
Offset By Lower Than
Forecasted Operating
Expenses

Total revenues increased 5.9% year-over-year, below our forecast of 7.5% and 3Q's 8.0% rate as a result of a 6.7% decrease in "other" revenues due to slowing cellular equipment revenues (from price cuts) as well as the deconsolidation of SBC's UK cable operations (reclassified as equity income following the merger with Telewest). Local telephone revenues, however, grew 8.1%, an acceleration from 7% in 3Q and toll revenues declined only 4.6%, an improvement from the 13% decline in 3Q. Excluding one-time expenses, cash operating expenses increased only 5.0% and total operating expenses increased only 5.0% and total operating expenses increased only 4.9%, an improvement from 3Q's 5.4% growth and better than our forecast of 5.7%. Normalized operating income totaled \$830 million, up 9.3% year-over-year, about \$40 million shy of our forecast of \$870 million (13% growth) due to the slower than forecasted revenue growth.

Interest Expense and Taxes Also Lower Than Expected Interest expense totaled \$126 million, \$9 million lower than our forecast and down \$5 million y/y despite a slightly higher debt balance. Equity income from affiliates increased to \$46 million (vs. our forecast of \$41 million) from \$12.6 million in the year ago quarter due primarily to an improvement in the Telmex contribution. In addition, SBC's UK cable investment (15% ownership in JV with Telewest) is now deconsolidated and reclassified as equity income. We estimate that Telmex contributed about \$70 million (\$0.07/sh) in 4Q, up slightly up from 3Q's \$65 million (\$0.07/sh). Partially offsetting Telmex contribution was dilution from SBC's investments in UK cable, Chile, France and Korea (which we believe peaked in 1995 at \$0.10-0.12/sh and should gradually decline in 1996 & 1997). SBC reported an effective tax rate of only 30%, 32% on a normalized basis, lower than our forecast of 33.5% due to adjustments after the discontinuation of FAS 71 in the third quarter and year-end tax settlements. We forecast an effective tax rate of 34% going

Exceptional Telco Growth Continues ■ SBC grew total access lines a surprising 4.5%, well above our forecast and the 30's 4.2%. Residential lines grew 3.1%, up from 2.8% due to strong additional line growth — 50% of the residential lines added in the last 12 months were additional lines and penetration is now over 12.5%. Business line growth accelerated to 7.7% from 7.4% in 3Q. Minutes grew 10%, just below our forecast and 3Q's 11%. SBC's intraLATA toll volume declined 3.2% and toll revenue declined 5% due to intraLATA toll competition, expanded local calling areas and a shift some toll customers to discounted optional calling plans. Overall, SBC estimates that is recovers about 80% of toll revenues lost in other revenue streams.

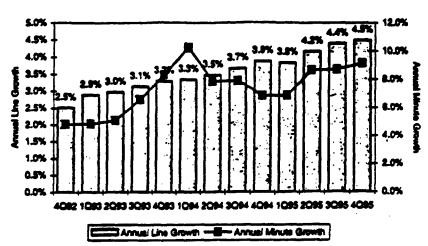
Strong Demand For Vertical Services

■ Vertical services revenue accounts for 22% of total local service revenues. Caller ID customers tripled in the past 12 months to reach 22% penetration of the residential market and 4.5% penetration of the business market for a total customer base of over 1.8 million — and growing rapidly. SBC estimates residential penetration will reach 30% by the end of 1996 (over 2.5 million subscribers). At an average cost of \$7/month, that translates into a revenue forecast for 1996 of close to \$190 million — and we suspect the incremental margins on these revenues are extremely high; i.e., at least above 60%.

Cellular Recovery

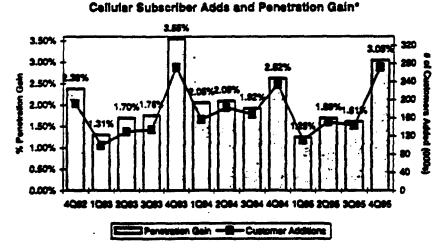
Southwestern Bell Mobile Systems (SBMS) added 272,000 cellular subscribers in the fourth quarter for an annualized penetration gain of 3.0%, slightly better than our forecast of 2.9% and much better than 3Q's 1.6% and 4Q94's 2.6% (234,000 adds). Total subscribers grew 22% year-over-year to 3.659 million for total penetration of 9%, the highest penetration rate of the in the industry. Industry-wide, as the subscriber base gets larger and larger, we expect year-over-year growth trends to continue to slow, yet the number of net adds should continue to improve year-over-year. Cellular revenues grew 25% while cellular EBITDA grew 41% year-over-year, reflecting an improvement in SBMS' EBITDA margin to 40% from 35% in the year ago fourth quarter. We estimate SBMS' revenue per sub averaged \$57/month, only a 6% year-over-year decline, better than our estimated RBOC average decline of 9%.

SBC: Continued Line Growth Acceleration Access-Line and Minute Growth



Celiular Stronger Than Year-Ago 4Q

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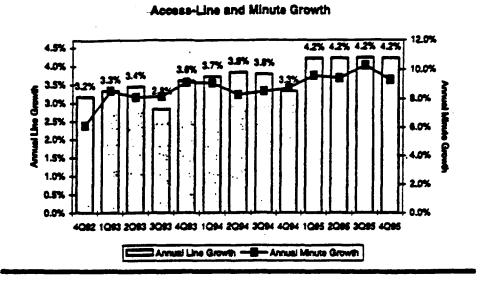


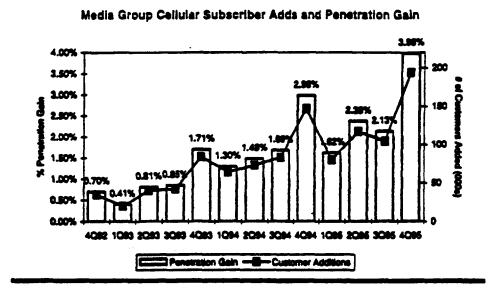
"Penetration-gain reflect net subscriber additions (annualized) divided by population in properties.

Investment Conclusion We continue to rate SBC shares Accumulate (2) in the intermediate term and Buy (1) in the long-term because it has achieved over 10% EPS growth for the past four years, is now 100% price cap regulated, has the lowest payout ratio of the group, low competitive risk (new Texas law, few large cities), premier cellular properties and low likelihood of rapid (and speculative) broadband video build-out. In addition, as shown by the fourth quarter results, SBC continues to report very strong, RBOC leading, growth in its core telco operations. Finally, Ameritach's and BellSouth's recent dividend announcements set the stage for an acceleration in SBC's dividend growth rate (vs. 4.4% in 1995 and 4.6% in 1994) as SBC is the RBOC with the lowest payout ratio of the group (53% in 1995) and the highest 5-year growth forecast (11%). We expect SBC's dividend announcement will be made following its Board meeting on March 28. SBC is rated B-2-1-7.

Telecom Services - 23 February 1996

U S WEST: Strong Line And Minute Growth Continues





investment Conclusion We rate U S WEST Communications Group 8-2-2-7. We recently lowered our long term view on U S WEST from Buy (1) to Accumulate (2) based on price. We maintain our target price of \$39 on U S WEST share (15% upside) based on a target 1996 P/E multiple of 15.6x (5% discount to the current S&P multiple of 16.4x). In addition, U S WEST offers a 6.3% dividend yield. We expect the service quality problems that have dragged down U S WEST's earnings in the past year will begin to subside in 1996, allowing EPS growth to accelerate throughout the year. U S WEST has had difficulty keeping up with the demand for new lines that resulted from its strong regional economic growth — but increased capital expenditures in 1995 added enough capacity to help reduce held orders and should allow U S WEST to keep up with demand going forward.

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GTE. GTE - \$45

Highlights: 4Q \$0.01 Above , Raised 1996E

Strongest Line Growth of the Group

Rate Reductions Totaled \$456M in 1995

Cellular Slowed Dramatically

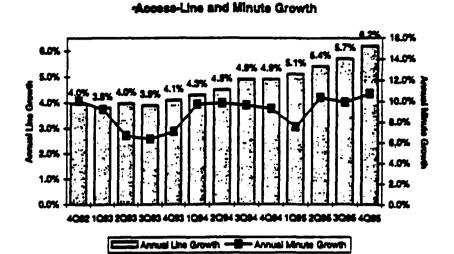
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Long Distance Opportunity

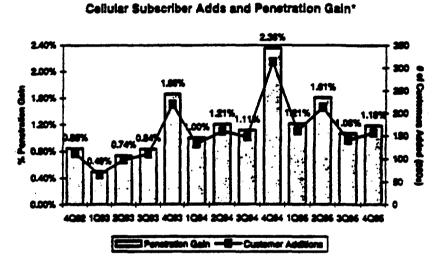
ORG	Sheres	408A 408A					Growth Rate	
Ratina	Que	40854	40044	19964	1996	19975	MM	17/24
B-2-2-7	975	\$0.74	\$0.67	\$2.61	\$2.87	NA	10.0%	NA
' EPS figu	rec e/e on	recurring t	esis and thu	t do not reflec	cne-time tems			

- GTE's fourth quarter recurring earnings of \$0.74 per share vs. \$0.67 in 1994 and full year earnings of \$2.61 were one cent above our and consensus estimates of \$0.73 and \$2.60, respectively. The quarterly gain is the second consecutive increase at a double digit rate. Management, at a mid-November Conference, predicted "at least 10% EPS growth for the foreseeable future." We raised our 1996 estimate from \$2.65 to a \$2.65 \$2.90 range.
- Telephone volume gains were especially strong with access lines up an excellent 6.2% and minutes of use up 10.8%. International access lines (included in the 6.2% gain) grew by a fairly modest 3.5% mainly due to a reclassification in the Dominican Republic. Domestic gains in lines and usage were company-wide with the Northwest and South especially strong. Telephone productivity also improved with access lines per employee increasing from 252 to 289. We expect further improvement in 1996 with 4,000-5,000 positions eliminated.
- Telephone rate adjustments had a negative \$110 million impact on the fourth quarter and for the year rates were lowered, mainly to remain competitive, by \$456 million. In other words, GTE has been passing along almost dollar for dollar costs savings from process re-engineering. To achieve company predictions of 6% to 8% top line growth rate reductions will have to slow in 1996 to perhaps half of the 1995 rate.
- E Cellular customer adds slowed fairly dramatically in 4Q to a 25% annual subscriber gain. A total of 157,000 net new domestic customers were added bringing the U.S. total to 3,011,000. For the full year cellular customers were up an adjusted 30%. Domestic penetration is 6.3%. Average monthly revenue per subscriber was \$61 down from the \$66 a year ago and \$63 in Q3 of 1995. GTE is directing its attention to adding "better- quality" customers due to the high costs to add a new customer and the "way too high" 2.7% monthly churn rate (industry average churn is about 2%). Customer addition costs dropped to \$356 for the quarter from \$375 in 3Q. We believe the new Cellular President will concentrate on margin improvement by reducing churn and the cost of adding a new subscriber. Operating cash flow margins improved from 30.2% to 36.4%.
- At its quarterly analyst meeting on February 15, GTE was sanguine about prospects in long distance projecting a 10% market share of a \$4.8 billion addressable market from calls originating in-region over the next 12 months. GTE will resell long distance with WorldCom the principal facilities supplier. We look for GTE to add long distance customers this quarter. Initial top line group will not immediately produce bottom line earnings. GTE is freer to enter long distance than RBOCs because of different consent Decree.

GTE: Best of the Group Line Growth



Worst of the Group Cellular Gains



"Penetration-gain reflect not subscriber additions (annualized) divided by population in properties

Investment Conclusion

We maintain our B-2-2-7 opinion on GTE's shares. GTE's VP Finance repeated the company's November, 1995 projection that 1996 EPS will grow at a "Rate of Not Less than 10%." Despite the positive tone of the quarterly analyst meeting, GTE shares dropped 2 1/4 points or 4.7% on Thursday 2/15/96. We attribute this to weakness across the entire telecom group rather than to anything said at the analyst's meeting. GTE shares yield 4.1% on the current dividend of \$1.88. We see the payout ratio falling to 65% in 1996 compared with 72%. We expect the company's board to wisely forego an increase this year. With the new telecom legislation, GTE, unlike the RBOCs, can enter the long distance business immediately and it does not have to be through a separate subsidiary — an opportunity which could provide a boost to earnings growth in the future.

4

1997

8

JANUARY

THURSDAY.

Malone Says TCI Push Into Phones, Internet

Isn't Working for Now

Hype Exceeded Feasibility, So Cable Company Opts For Return to Its Roots

'Chasing Too Many Rabbits'

By MARK ROBICHAUX

Staff Reporter of THE WALL STREET JOURNAL DENVER — John Malone, chief of the nation's biggest cable company, Tele-Communications inc., has a stunning admission to make. His widely hailed vision for TCT's future as a multimedia powerhouse straddling television, telephones and the Internet, isn't working.

It was too ambitious, over hyped, and impossible to carry out on schedule, he says. In its place, TCI is pursuing a much-diminished strategy and scrambling to make a major retreat to its roots in cable.

"We were just chasing too many rabbits at the same time," Mr. Malone says in

his first extended interview in several months. "The company got overly ambitious about the things it could do simultaneously."

The litany of missteps Mr. Maione rattles off – and apologizes for –
mark an unusual admission by any chief executive.
They are especially striking coming

John Malone

from the 55-year-old Mr. Malone, who has long enjoyed a reputation as one of the most astute and influential visionaries of how new technologies are transforming the media world.

For one, he is abruptly revising his longstanding promise that TCI was set to become the powerful lord of the new information superhighway, using cable to deliver phone service, the Internet, and other futuristic interactive goodies.

"If you read our annual report last year, you'd think we're one-third data, one-third telephone and one-third video entertainment, instead of 100% video entertainment and two experiments," he says. The hype, he concedes, "influenced our staffing and the market's perception of the business."

On the subject of PCEs paid into the telephone business, he is particularly sober. Like other hig cable operators such as Time Warner Inc., TCI has been heralding for years the promise of using its cables to deliver phone service and citing that promise as a big justification for its capital spending, which totaled about \$1.7 billion in 1996.

But now, Mr. Malone says: "I think I have a pretty good handle on the risks and problems." And he doesn't know whether the two-way technology that cable operators are aggressively deploying over their cable lines is "the right technology, given the understanding we currently have of where the business is going."

Mr. Malone pulled back from day-today operations at TCI this year to focus on other divisions of the company, and to ponder a retirement in which he would enjoy his custom-built 80-foot yacht Liberty.

Meantime, business at TCI, which reaches 14 million subscribers, took a dire turn. The direct-broadcast satellite industry was mounting a major assault on cable's longtime monopoly. In TCI's recent third-quarter report, which Mr. Malone dubs his "wake-up call." the company acknowledged losing 70,000 customers, representing potential revenue of \$25 million a year, mainly to rate increases and satellite rivals.

At the same time, TCI's stock was in the doldrums, bumping in the \$13 range, not far from its 52-week low. And a \$15 billion pile of debt, largely from buying up cable systems, had investors worried that TCI was financially straitjacketed just when it most needed a big investment to fight its new competitors.

"Our biggest concern: They didn't have financial flexibility," says Neil Begiey, an analyst at Moody's Investors Service Inc., explaining the agency's downgrade of TCI's debt to below investment grade earlier this year. "They're increasingly leveraged at a time of increased competition, and that's an industry problem, not just TCI."

'Let's Get Real'

In the fall, Mr. Malone put his hands back on the tiller of TCI, returning to 14-hour days at its headquarters here. His new plan, he says, is to go back to a simpler life in the cable industry. He somberly sums up his new mission thus: "My job now is to prick the bubble. Let's get real."

With all the seal of a convert, he has a new sermon. The old cable industry is a perfectly good business to be in, and shouldn't be penalized for failing to deliver on all its promises, he says. Moreover, telephone companies have retreated as video competitors to focus on long-distance business.

"Right now, we've got zero revenue from residential telephone service, diminishing revenue from high-speed Internet, and \$6 billion in revenue from video entertainment," he says. "And for the Street to

Please Turn to Page 3, Column 1

Malone Says Expansion Isn't Working Now

Continued From First Page
be sitting there. Boy let's kill this company's stock because they don't know what
they're doing in telephony,' that's brain
damage."

He compares TCI's position today to a time 22 years ago, just after he had joined the company. TCI's stock was a laggard, it had revenue of about \$22 million and debt of \$135 million. Looking for comfort at his parents' house in Connecticut, he sat with his father under a tree in the backyard. Recalls Mr. Malone: "He said, 'T've been reading about you and Bob [his late partner Robert Magness], and I think there's nothing wrong with you guys except your mouth is bigger than your a—You've got indigestion from overambitiousness. Back up a bit and pace yourself."

Mr. Malone came by his new religion after TCI's bleak third-quarter results prompted a stark reassessment both inside and outside the company. A red-flag: Operating cash-flow growth for the quarter was 3.4% excluding acquisitions, well below Wall Street's expectation of double-digit growth. That caught the attention of bond-rating agencies, which use the debt-to-cash-flow ratio as a key indicator of a cable company's health.

Mr. Maione says the numbers spurred him to action. "It wasn't that the company suddenly went to hell," he says. "I want to make that very clear. But a positive that was expected to happen didn't happen: the reduction in the leverage of the company. We had to do something. Had we not, it could mean tens if not hundreds of millions of dollars of losses for our bondholders. We said what we've really got to do here is reprioritize."

Shareholder Questions

Mr. Malone certainly risks alienating investors with his strategic about-face. Many of them bet big on his grand promises, only to watch their TCI stock languish amid a historically strong stock market.

Three weeks ago, he summoned TCT's 15 biggest shareholders to Denver, outlined his new plans for a pullback, and took a barrage of questions from the group. There are some signs he won their support. "The company has dramatically increased its focus." says media investor Gordon Crawford, money manager at Capital Research & Management Co., which owns a large chunk of TCI shares. He says the other investors at the meeting are generally on-board too. "Most investors are greatly relieved that John is back."

Mr. Malone says he took pains at his shareholder meeting to set realistic goals for TCI. That is a big change for a company that has been famously guilty of promising new technology -500 channels, digital settop boxes - that it can't deliver on time.

"One way to get credibility is to be very cautious, very conservative about what we predict," Mr. Malone says, cradling a cup of coffee in his spartan office. "I'm not

going to get caught in the trap of predicting anything in particular."

He now says he takes personal blame for the industry's two-year delay in delivering the new digital-cable boxes that will match some of the most appealing features of digital-satellite services, including scores of additional channels, on-screen viewer guides, and higher-quality sound and pictures. "This is my brainchild, I invested in it, I started it, I believe in it, and I'll take all the blame for its tardiness," he says.

TCI is already rolling out the boxes in 500 homes in Hartford, Conn., where it is also testing telephone service. Other target test areas: the San Francisco Bay Area and Arlington Heights, Ill. Mr. Malone says that when the boxes are in wide release commercially, they will "knock the socks off" satellite-dish companies. But it is unclear how quickly supplier General Instrument Corp. of Chicago can produce the boxes given its delivery record so far.

"When it ultimately turns out to be everything we hoped it would be and more, then I think we'll be vindicated," he says. Though TCI has pulled back on spending, for two-way services, Mr. Malone said he isn't ruling out success of Internet or even telephone business, but they remain too expensive to build and maintain for now.

While he awaits the wide distribution of his digital boxes, Mr. Malone has turned his attention to cutting cable-programming costs, which he says have ballooned out of control. He cut 2,500 staff and cut pay of top managers up to 20%.

To reduce debt on the parent company and simplify the business, TCI is in various stages of spinning off certain units into separate securities: Liberty Media Corp. programming assets, international operations, a satellite business, and most recently, telephony operations. The share-holders should like it, Mr. Malone says, since they asked for it.

The Late Chairman's Stock

Finally, Mr. Malone says that TCI's stock price is "dirt cheap," and if it gets any cheaper, the company will buy back shares. Indeed, the depressed stock price has triggered other concerns. What is worrisome if it doesn't rise is that the estate of the late chairman, Mr. Magness, may have to sell a larger block of shares on the open market to pay the estate taxes. which are estimated to be more than \$400 million, according to executives familiar with the will. A huge block of votes no longer in friendly hands could potentially further depress the stock and loosen Mr. Malone's grip on the company. The will is currently closed to the public because of a protective order by a Denver court.

However, if Mr. Malone's strategy works, and TCI's stock value increases, it could allow Mr. Magness's heirs to sell a smaller block to pay taxes. Either way, says Mr. Malone, "I have the right of first refusal

"It's clearly my intent to make sure the voting stock stays in family or friendly hands," he adds. Indeed, the TCI board last month quietly announced a special dividend to give the heirs more liquidity. Ownership issues should be resolved in the next six to nine months, Mr. Malone says.

Confidence in Cable Chief

Putting an end to rumors swirting around Wall Street about management changes, Mr. Malone says that he has 100% confidence in TCI cable chief Brendan Clouston.

"My ambition was to be more investor and director and to be less of an operating guy." Mr. Malone says, "and every time I look back and see poor Brendan, I see I've created quite a monster of a company here, and I had better help out from time to time."

Mr. Malone has made no secret of his desire to spend more time away from the operating pressures at TCI. He says his wife, Leslie, has urged him to clock fewer hours at the office. After a proposed merger with Bell Atlantic Corp. fell through in 1993, their hopes were momentarily dashed.

These days, Mr. Malone says he would much rather be spending more time on his boat Liberty, a stunning 1920s-style commuter craft three years in the making, built with graceful lines, complex wood details and high-tech carbon fiber. "I spent a total of six days on that boat since it was built. I hope to spend more time on it next summer. By then, I hope the marketplace questions will be answered."

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The Washington Post

Holding the Line on Phone Rivalry

GTE Keeps Potential Competitors, Regulators' Price Guidelines at Bay

By Mike Mills

Never mend the 10 years of debate, millions of delians of blying and the agranges of President Cliston: A federal get has put core provisions of the succes's new talects case law on bold. And a company called GTZ Corp. is a big part of the reason why.

d by reviews. GTE is the largest local phase co y is the country (its service area includes Prince Willia may), but it has always been a quiet gime, willing to let cal Bell companies grab the attention from the hic and government regulators.

Now the company is throwing its weight around. With more Bush administration anterest one William P. Beer on board as lead attorney, it played a control role in perstanding a faderal court in St. Louis lest weak to freest key pracing provisions of the telecommunications lew. That lew orders local phone companies to belp competitors get estab-

lished by lessing them capacity on equating phone networks.

GTE has been busy as exist required phone as well, it has sought rate surveises to many states, including Virginia. opes rous moreous a many states, polaring Virginia. If 2 will send more revenue to ment froming compan-TTE also is married to the company of tion. GTE also is seeing status as a "rural" current three out Virginia and many other states, which could ensure it from cooperating with compensions at al.

They've been doing this all over the country," said William leby, a telecommunications analyst for the Virgin Scale Corporation Communica, GTE's in the most contr tions make rate case we've had at this commission made the easty 1980s," leby mid.

See GTZ CIA CAL 1



THE LIMIT P. MARIE overs as GTE's land half

THE VAMENCION POST

C16 VEDICEDAY, OCTORE 23, 1996

Quiet Giant Puts Hold On Local Phone Rivalry

GTE says its regulatory assent has and wife. To make sure the company is specty compensated by concensus d competers who use its marwark. We have been negociating and will continue to accounts with any and all connections," and Stephen Sp GTE & Virginia director of estatutal al-

Many people are surprised to hack that the biggest local phone company isn't a Bed. But with revenue of \$20 billion but year, GTE bolds that title. Saving speed decades assembling a coles of phone symmes. While the Balls course distinct regard of the Unional States, GTE's 28-state service territory looks like a shotgen blast on the U.S. map, with small phone op-

GTE wasn't part of the deal that TATA mort to steel serves set secret Corp. m 1984, and has often parted ways with them in the deless over CORRECTORES POÄCY.

The biggest thing separating them now is long districts. The recently exacted law grants the Bells' was to enter the long-distance business, which was barred to them by the 1984 deal. but it sets up a sweek They first must prove they fact competition is their locui phone suspensio

That means represent interconcection" deals with companies that want to compete against them in the ioral phone business. If voluntary agreements bell state requisions can and as establishment.

That impediatance carrox does not CONT to CTE, bowerer, CTE has been for since 1992 to offer long-distance.

That gives GTE a bergaining advan-tage over fature rivals that the Bolls de not enjoy, said Dick Notabeert. chief executive of the Michaelera Bell may Accepted Corp. The bas difference between us and them is they're already in long distance," he "That's their mountain" to coo-

"It's one of the biggest shortess-ings of the telecommunications act," and help of Verguin's State Corpora-tion Communica, "There's sections in 2 for them, so they're doing every-thing they can to fight computation." GTS officials deary they have the

uper hand, and my they will allow citers into their mariest because the her requires it. "It's not as inco trop attacken, it's the law of the hand," said Bob Brand, GTE assistant was nident for external communica-

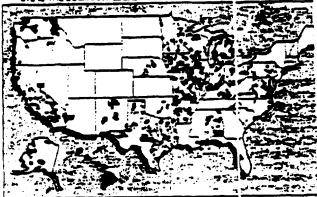
But in Virginia, Bell Atlantic Corp. generally has been more cooperative atial rivals than has GTE.

When the federal pricing rules were from by the St. Louis court last ek. Bell Attentic and AT&T told Virginia regulators that an earlier expect to use the pricing rules wtil fool ook studies were com would remote much. GTE would make

Voluntary negotiations between GTE and AT&T bave ready out gut-ton very far, if anywhere," said Wisso McCarey, were president for govern-ment affairs for AT&T's Atlantic reper. We will have to meraly minutes vertically all of the seases before the

GTE officials made the count's "star" of the rules gives them the opportunity to present their own cost models and. **GTE'S WIDE REACH**

GTE IS THE DOMINANT LOCAL PHONE COMPANY IN PARTS OF 28 STATES



they hope, to persuade regulators that the FCCs guidelines were too low.

For execute, GTE chains that Bell Advetic serves a fer decser population (180 lines per square mile, compared with GTE's 45 lines), and thus has lower costs that enable Bell Atlantic to accent lower pross for image its sal-

GTE also is among the first phone compares to the cation to ask for rate mes in the attenuath of federal iegalizze, which investigers procused consumers would lead to more compecoon and lower rates.

GTE first seized to raise rates for Vogene contomers in June 1995, but nded as request this year acres public cancey. Its current plan is to rame rates from a range of \$6.60 to \$13.83 to a new range of \$12.96 to \$16.83.

The entry money is needed, GTE says, to belp it "rebal ---sources in the face of companions.

GTE also is arguing that it should be described a rural carrier to Virgin-2-4 designation to the new law that exempes remote phone companies from requirements to cooperate with future compeniors. If the commission agrees, competitors would have t prove—if they at: allowed to com at all—that their remediess to the h cal phone nature is wouldn't impro-'economic or to heich" burdens o the original currer.

CITÉ argues tat, while its plans securary covers 25 percent of the state's lead state, it surves just 12 per cost of Virginia's telephone custom es. Nesty 30 serons of ear inc. instantial quily under the defe non in the act, and in Virginia, all o our imms do." Best d and.

ATET'S McCa of said GTE shock not be allowed to inches well-populat ed high-growth a was such as Miss es and Dale City in Primer William County as rural. I GTE was that day and there's and exact militard of comp stores developing a CTE territory to Virginia."

FOR MORE INFOCULATION AT

For a corporate p while of GTE. including update I stock quales and recent SEC filings, click on the above symbol on the fron I page of The Past's site on the Vorld Wide Web at Attigit / www. masin system past. com

ICC Staff Ex. 5.01

REBUTTAL TESTIMONY

OF

SAMUEL S. MCCLERREN

TELECOMMUNICATIONS DIVISION

ILLINOIS COMMERCE COMMISSION

DOCKET 96-0404

NOVEMBER 1996

Are you the same Samuel S. McClerren who filed direct 1. 1 Q. testimony in this proceeding? 2 3 A. Yes, I am. What is the purpose of your rebuttal testimony? 6 2. Ο. 7 I update my answer in Direct Testimony regarding A. 8 complaints by entities seeking interconnection, access, 9 or the ability to resell IBT's services. ICC Staff Ex. 10 5.00, p. 11. In my Direct Testimony, I expressed 11 12 concern about timely submission of the "Joint Grooming Plan" and listed complaints by interconnecting 13 entities. Since my Direct Testimony was filed, I 14 15 received a copy of the Joint Grooming Plan and I also 16 received a data response from Teleport Communications Group ("TCG"). 17 18 3. Does the receipt of the Joint Grooming Plan satisfy 19 Q. 20 your concern? 21

A. While I am pleased that IBT and MFS have completed the document, I remain concerned about the amount of time it took to consummate the document. IBT and MFS, as a result of a negotiated agreement, took over three months longer to finish this document than originally

agreed. If it took this long to finish the document as 1 2 a result of a negotiated agreement, I am concerned that it will take even longer to consummate an agreement 3 resulting from arbitration. 5 Why might it take longer to finish a Joint Grooming 6 4. Q. Plan document resulting from an arbitration? 7 9 A. There could be more acrimony between the two parties 10 resulting from the arbitration proceedings. 11 12 Is there any other potential reason for subsequent 5. Q. 13 Joint Grooming Plans to take longer to consummate? 14 IBT's witnesses in this docket have relied 15 A. 16 heavily on the MFS/IBT negotiated agreement as support 17 for their position that IBT has entered into a binding 18 agreement for interconnection, and the Joint Grooming 19 Plan is a key document resulting from this negotiated

agreement. Without the need to support this position,

IBT may not be as motivated to consummate a Joint

Grooming Plan resulting from future agreements.

6. Q. What is there in the data response from TCG that you want to address?

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1 A. Staff data request 10 asks TCG to describe any
2 complaints/problems you have against IBT concerning
3 interconnection. TCG states that it has been unable to
4 obtain a satisfactory level of redundancy in facilities
5 interconnecting with IBT.

6

7

7. Q. What is TCG's concern, specifically?

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9 A. TCG is interconnected with IBT's network through 10 collocations at IBT's tandem switches or the closest 11 collocated end office, each of which has a single point of failure. TCG states that IBT did not allow TCG to 12 13 implement diverse trunking to avoid a single point of 14 failure, with IBT claiming that its own network was 15 engineered with a single point of failure for many of 16 its routes.

17

18 8. Q. Have there been any negative repercussions resulting 19 from this lack of redundancy?

20

A. TCG stated that the lack of redundant facilities
resulted in a service outage for TCG customers for
traffic from the 708 and 630 area codes on September
20, 1996. TCG stated that the outage lasted from 10:50
a.m. to 2:30 p.m., and was caused by an unauthorized
contractor dig-in.

9. Q. Does this conclude your rebuttal testimony?

2

3 A. Yes, it does.

SERVICE LIST CASE NO. U-11104

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Continental Cable Vision
Timothy P. Collins
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Michigan Consumer Federation Richard D. Gamber, Jr. 115 West Allegan - Suite 500 Lansing, MI 48933

SERVICE LIST CASE NO. U-11104

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SERVICE LIST CASE NO. U-11104

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Telecommunications Resellers Association Andrew O. Isar 4312 92nd Avenue, NW Gig Harbor, WA 98335 BRE Communications, Inc. Richard C. Gould 4565 Wilson Avenue Grandville, MI 49418

STATE OF MICHIGAN BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

)

In the matter, on the Commission's own

arrangements offered by the ILECs.

motion, to consider Ameritech Michigan's) compliance with the competitive checklist) Case No. U-11104 in Section 271 of the Telecommunications) Act of 1996)
AFFIDAVIT OF C. MICHAEL PFAU ON BEHALF OF AT&T COMMUNICATIONS OF MICHIGAN, INC.
STATE OF ILLINOIS)) ss. COUNTY OF COOK)
I. C. Michael Pfau, being first duly sworn upon oath, do hereby depose and state as follows:
1. My name is C. Michael Pfau. My business address is 295 North Maple
Avenue, Basking Ridge, New Jersey 07920.
2. I am employed by AT&T Corp., and I serve as Division Manager, Local
Services Division Negotiations Support.
3. My responsibilities include helping to develop and communicate the

business requirements to the regional teams negotiating with the Incumbent Local Exchange

Carriers (ILECs). I also assist the regional teams in performing feasibility assessment of business

- 4. I began my career in Bell of Pennsylvania, where I had various assignments in central office engineering, plant extension, circuit layout and regulatory operations. Just prior to divestiture, I moved to AT&T General Departments, where I was responsible for managing intrastate service cost models. My next assignment was in an AT&T regional organization responsible for regulatory implementation support of service and marketing plans within the five Ameritech states. I then moved to a headquarters position responsible for managing market research related to business communications services. Immediately prior to my current assignment, I worked within the product management organization, focusing upon private line data services.
- 5. I have a Bachelor of Science degree in Mechanical Engineering and a Masters Degree in Business Administration, both from Drexel University. In addition, I have a Professional Engineering License from the State of Pennsylvania.

SUBJECT OF STATEMENT

- 6. My testimony responds to Ameritech's claim that it will provide nondiscriminatory access to Ameritech's operations support systems (OSS), a subject addressed in the testimony of Ameritech witnesses Dunny, Mayer, Mickens and Rogers.
- 7. First, I will discuss the requirements for the efficient exchange of OSS information between Ameritech and competitors who resell Ameritech's local services or purchase unbundled network elements (UNEs). More specifically, I will discuss the requirements for the

electronic interfaces between AT&T and Ameritech's operations support systems that are necessary to permit effective competition to develop in the provision of local services.

- 8. I will then address how the interfaces proposed by Ameritech in this case for access to its operations support systems and databases do not meet those requirements because (1) CLECs cannot rely on Ameritech's interface specifications because they are still being revised, (2) several of the essential OSS interfaces which Ameritech claims to have deployed within the last month have never been used or tested by any CLEC. (3) testing of other OSS interfaces by AT&T has not produced satisfactory results. and (4) Ameritech has not demonstrated that its interfaces will provide parity of access to Ameritech's operations support systems.
- 9. Next, I will address certain deficiencies in the measurements proposed by

 Ameritech for determining whether Ameritech is actually providing nondiscriminatory access for resale services and for unbundled network elements.

OPERATIONS SUPPORT SYSTEMS

- 10. "Operations support systems" or "OSS" are the systems and databases that provide essential information and functionality required to perform the pre-ordering, ordering, provisioning, maintenance and repair, and billing functions for the sale or resale of telecommunications services.
- 11. "Pre-ordering" is the process of obtaining the necessary information to enable the carrier's customer service agent to place an order for telephone service. It encompasses

the interaction between the carrier and the customer from the point of initial contact up to the placement of an order for new service or modification of an existing service. Pre-ordering ordinarily takes place while the customer is "on the line." Pre-ordering includes a determination of the customer's existing service, a determination of the availability of new services and features that might meet the customer's needs, address verification, a determination of whether a site visit is required to establish or modify service, the scheduling of any appointment, the assignment of any new telephone numbers, and establishing a date for the commencement of service.

- 12. "Ordering" is the process of placing an order for telecommunications service. For purposes of this proceeding, ordering is the process by which AT&T places an order with Ameritech for the provision of either local service resale or unbundled network elements necessary for AT&T to deliver service to AT&T's local retail customers.
- 13. "Provisioning" is the process of implementing the order for telecommunications service, including initial order verification, firm order confirmation, the monitoring of service order status, and order completion. For purposes of this proceeding, provisioning is the process by which Ameritech implements an order from AT&T for a resold local service or unbundled network elements as part of AT&T's establishment of local retail service for its customers.
- 14. "Maintenance and repair" refer to the monitoring and fault management activities, including trouble reporting and the monitoring and correction of reported troubles, to assure proper functioning of local services.

- 15. In the case of local service resale and the purchase of unbundled network elements. "billing" refers to the processes by which Ameritech must record and transfer to AT&T the customer usage data and service element detail that AT&T needs to bill its retail customers for local service. Billing also includes, when AT&T uses a UNE local switching element to provide service, any information necessary to bill interconnecting carriers for either local exchange access services or other terminating local usage.
- of information between the operations support systems of Ameritech and AT&T, or for that matter between Ameritech and other competitive local exchange carriers (CLECs), is absolutely essential for the development of meaningful competition in the provision of local services. When AT&T first enters local exchange service markets in Michigan on a large scale, its ability to provide local services to customers will be highly dependent upon its ability efficiently to obtain local services and unbundled network elements from Ameritech, which will depend in turn upon the efficient exchange of information between AT&T and Ameritech across all of the previously described OSS functions. Most of the necessary information for responding to initial service requests and for establishing, maintaining, and billing for service resides in the various operations support systems of Ameritech. Ameritech is thereby in a position to control the availability, accuracy and timeliness of information that is essential to AT&T's ability to compete.

NONDISCRIMINATORY ACCESS TO OPERATIONS SUPPORT SYSTEMS

- AT&T must minimally be able to obtain the information in Ameritech's operations support systems with no less timeliness, accuracy, or ease of access than that experienced by Ameritech personnel.

 If. for example, a customer calling to inquire about obtaining service from AT&T cannot get timely answers to his/her questions because AT&T's customer service agent has difficulty obtaining accurate and timely information from Ameritech's operations support systems, then the customer will perceive AT&T's service as inferior, and there will be a very real risk the customer will not take service from AT&T, or will switch back from AT&T to Ameritech.
- 18. The FCC recognized the importance of nondiscriminatory access to operations support systems for the development of competition in its First Report and Order in Docket No. 96-98 where the Commission stated that:

"[I]f competing carriers are unable to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for network elements and resale services in substantially the same time and manner that an incumbent can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing nondiscriminatory access to these support systems functions, which would include access to the information such systems contain, is vital to creating opportunities for meaningful competition."

I strongly agree with those statements.

First Report and Order, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 (released August 8, 1996), at ¶ 518.

- 19. In its August 8, 1996 order, the FCC ordered that "an incumbent LEC must provide nondiscriminatory access to their operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing" that is comparable to the access that is available to the LEC itself. (¶ 523)
- OSS interfaces provide (1) equivalence of information availability, (2) equivalence of information accuracy, and (3) equivalence of information timeliness. Ameritech apparently agrees with the critical nature of these tests as demonstrated by their proposal to measure exactly these parameters as part of showing their OSS access is nondiscriminatory (Mickens, Illinois Testimony, p.41). Beyond demonstrating attainment of these three conditions, Ameritech's OSS interface must be shown to be equally capable of supporting service delivered either through the resale of local services or through the use of unbundled network elements. Moreover each interface must demonstrate the ability to handle the transactional load reasonably expected to occur as the competitive marketplace develops.
- 21. Equivalent information availability means that Ameritech must deliver to the CLEC, to no lesser a degree than it does for its own employees all data necessary to support a specific transaction and the delivered data must be in useable formats and unambiguous to the recipient and not entail human intervention in order to acquire the data. The extent of human interaction is a genuine concern in that it raises the possibility of error interjection and slower